

REMARKS

Claims 1-28 are pending. By this Amendment, claims 1, 2, 18, and 19 are amended. No new matter will be incorporated into the present application by entry of this Amendment. If the Office determines that any additional fees are deemed to be necessary with the filing of this Amendment, then the Office is authorized and requested to charge such fees to Deposit Account No. 061910.

The Examiner rejected claims 1-6, 9-21, 24, 25, and 28 under 35 U.S.C. §103(a) as being unpatentable over Smith (UK Patent No. 2,145,257). The Examiner also rejected claims 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Smith as applied to claims 18 and 19 and further in view of Yamagishi et al (U.S. Patent No. 6,178,338). Applicant respectfully requests reconsideration in light of the following arguments.

The independent claims (claims 1, 2, 18, and 19) have each been amended to emphasize the variable number of items, the variable number of regions corresponding to the variable number of items and the arrangement of these regions along a continuous loop-shaped line, and the division of the loop-shaped range into a number of selectable sections.

The cited references fail to disclose these claim limitations. Smith is directed to a system for selecting items from a display using a selector that is separate from the display. Smith is particularly directed to a system suitable for use by persons of limited controllable mobility. The invention of Smith is designed to overcome the problems that such people may have in operating a keyboard having a large number of keys. *See, e.g., page 1, line 19 of Smith specification.* The solution is to provide an input means having a limited number of actuatable elements. In the examples described in Smith, four switches are provided which are closely spaced so that they may be operated by a user's tongue. The items to be selected are then divided into a number of

groups corresponding to the number of selections that can be made by the limited number of switches. The items are displayed on a display in groups, each group corresponding to one of the selector switches. Accordingly, Smith discloses a system in which there are very limited number of switches, generally less than the number of selectable items, and in which the items are displayed in groups based on the number of switches.

In contrast, rather than dividing the number of selectable items into a number of groups based on the number of switches, and displaying the items on the display accordingly, the claimed invention allows the items to be displayed on a display in a variable number of regions dependant upon the number of items, and then the input means being divided into a suitable number of selectable sections corresponding to the number of displayed regions. This is the reverse arrangement of the invention disclosed in Smith. This is achievable by arranging regions corresponding to the number of selectable items on the display along a continuous loop-shaped path, and providing the data input means with a loop-shaped range which is divided into a number of different sections. Since both the arrangement of regions corresponding to the selectable items on display are arranged along a continuous loop-shaped line, and the selectable sections of the data input device are sections of a loop-shaped range, the claimed invention allows easy selection of items irrespective of the number of items being displayed for selection. Smith fails to teach the loop-shaped arrangements required by the claims.

A prima facie case of obviousness with respect to the amended claims would also not be established because there is no suggestion or motivation in the cited references to modify or combine Smith with Yamagishi or any other reference in the art in any way that would result in the method and device Applicant claims. Quite to the contrary, Smith teaches away from the claimed method and device. Smith clearly teaches that there are a fixed number of switches and

that the items to be selected must be grouped into a corresponding fixed number of groups, and displayed on the display with direct correspondence to the arrangement of individual selectable switches. Accordingly, Smith does not permit a variable number of items to be displayed with the data input means being divided into a corresponding, variable, number of sections for selection of the items. This only becomes possible when the data input means can be divided into a variety of different numbers of selectable sections. This in turn can only be achieved where there are a sufficiently large number of selectable sections within the data input means. This generally cannot be achieved if there are only four individual selector switches as taught by Smith. Smith is also directed to a selection means which has a vastly reduced number of selectable switches, in particular many less than on a conventional keyboard, so that individual switches can be selected by a person of limited mobility. A selection of four switches cannot be considered to be a loop-shaped range that can be divided into a variable number of selectable sections to correspond to a variable number of regions on a display, as required by the claimed invention. Smith could not merely be altered to greatly increase the number of selectable switches as would be required to achieve the advantages of the claimed invention since it would go directly against its teachings.

An example of the advantage of the present invention is where a user is to select one of five items. With the arrangement described in Smith, in which there are four selectable switches, it is only possible to display four groups of selectable elements on the display and to select these. Accordingly, the five items would need to be divided into four groups, namely three groups containing one item, and a fourth group containing two items. If the user wished to select one of the items in the group of two, the user would first have to select the group of two items (at the first selection) and then the display would need to be re-established so that the previous group of

two items formed two individual groups each containing a single item from which the user could make a selection. Accordingly by having a fixed number of selectable switches and dividing the number of selectable items into a number of groups corresponding to the number of switches, two switch actuations are required to select the item.

In contrast, according to the claimed invention, the five items can be shown in five different regions arranged along a continuous line in the display, with the data input means being divided into five different sections. Therefore, any one of the items can be selected by selection of the appropriate section of the loop-shaped range of the data input means. However, as the claims require that a variable number of items may be displayed in an appropriate variable number of regions, with the data input means being divided into a variable number of sections, a significant advantage is achieved. To enable this variable number of items, regions, and sections to be achieved, it will be appreciated that the data input means must be able to be divided into a large number of sections, significantly greater than the four sections of Smith.

In view of the foregoing, it is submitted that the claims of the application are in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested. The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Kara K. Fairbairn', written over a horizontal line.

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